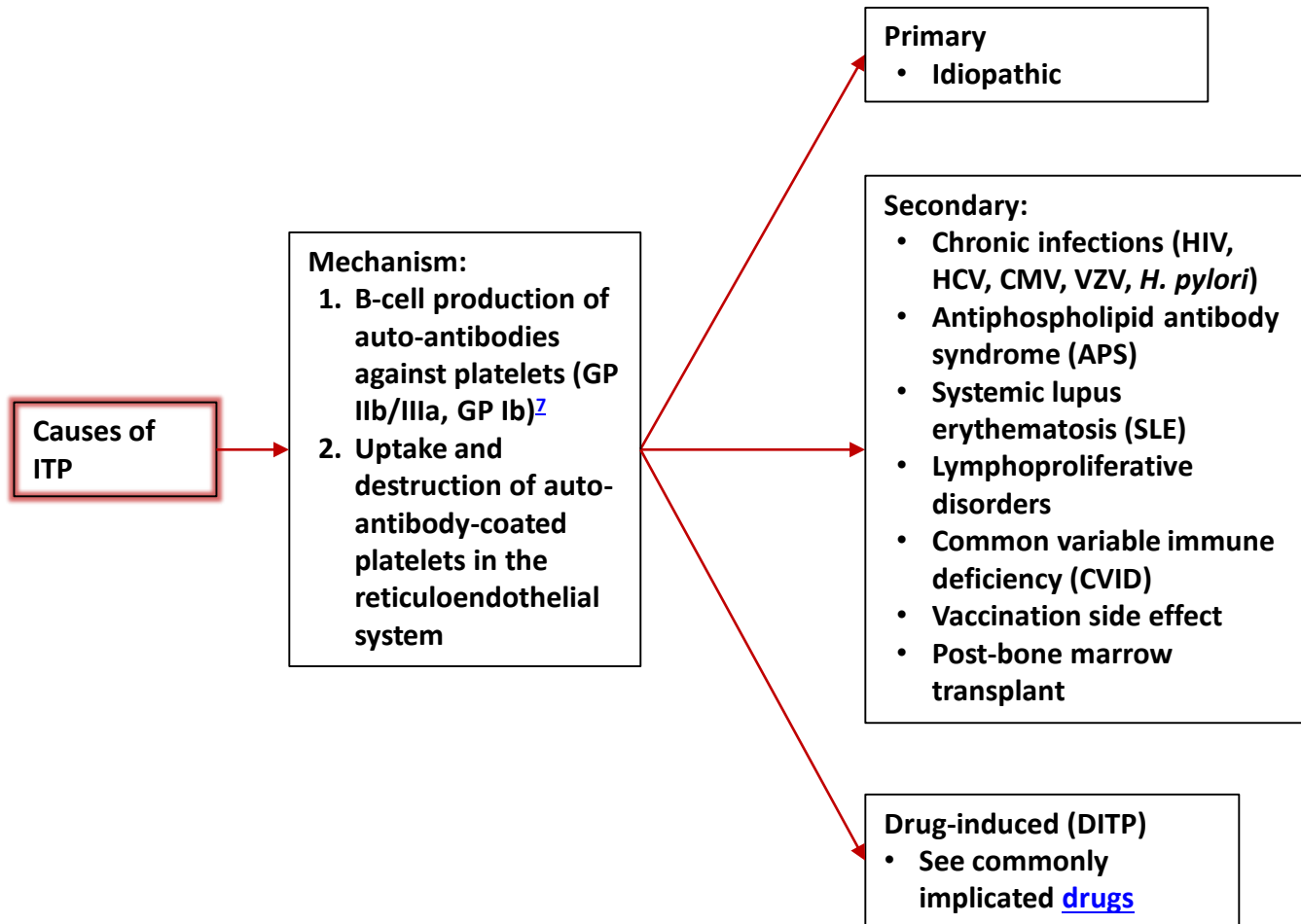


Immune thrombocytopenic purpura (ITP)

Updated: 5/24/2017

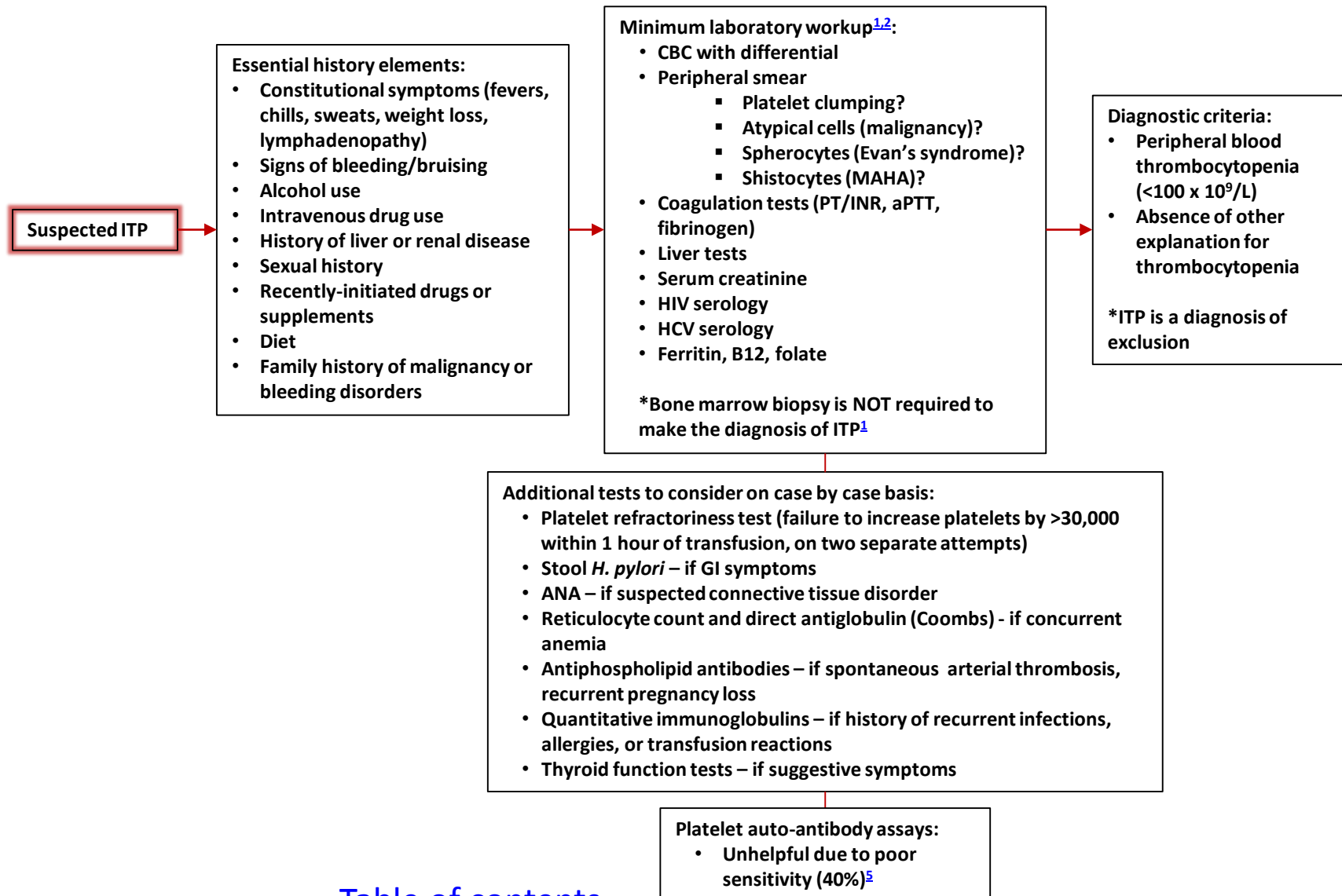
1. [Causes of ITP and when to suspect](#)
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Causes of ITP and when to suspect



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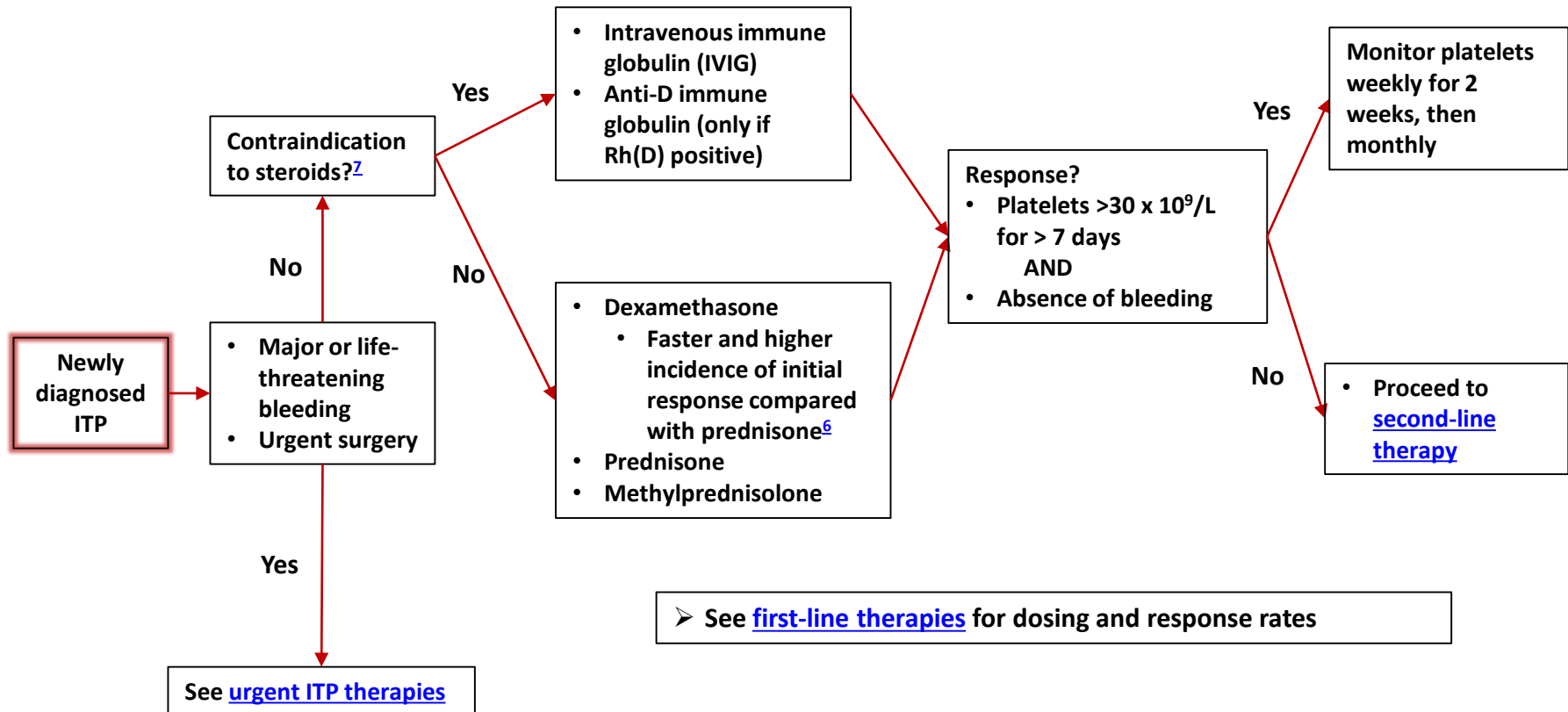
Workup for suspected cases



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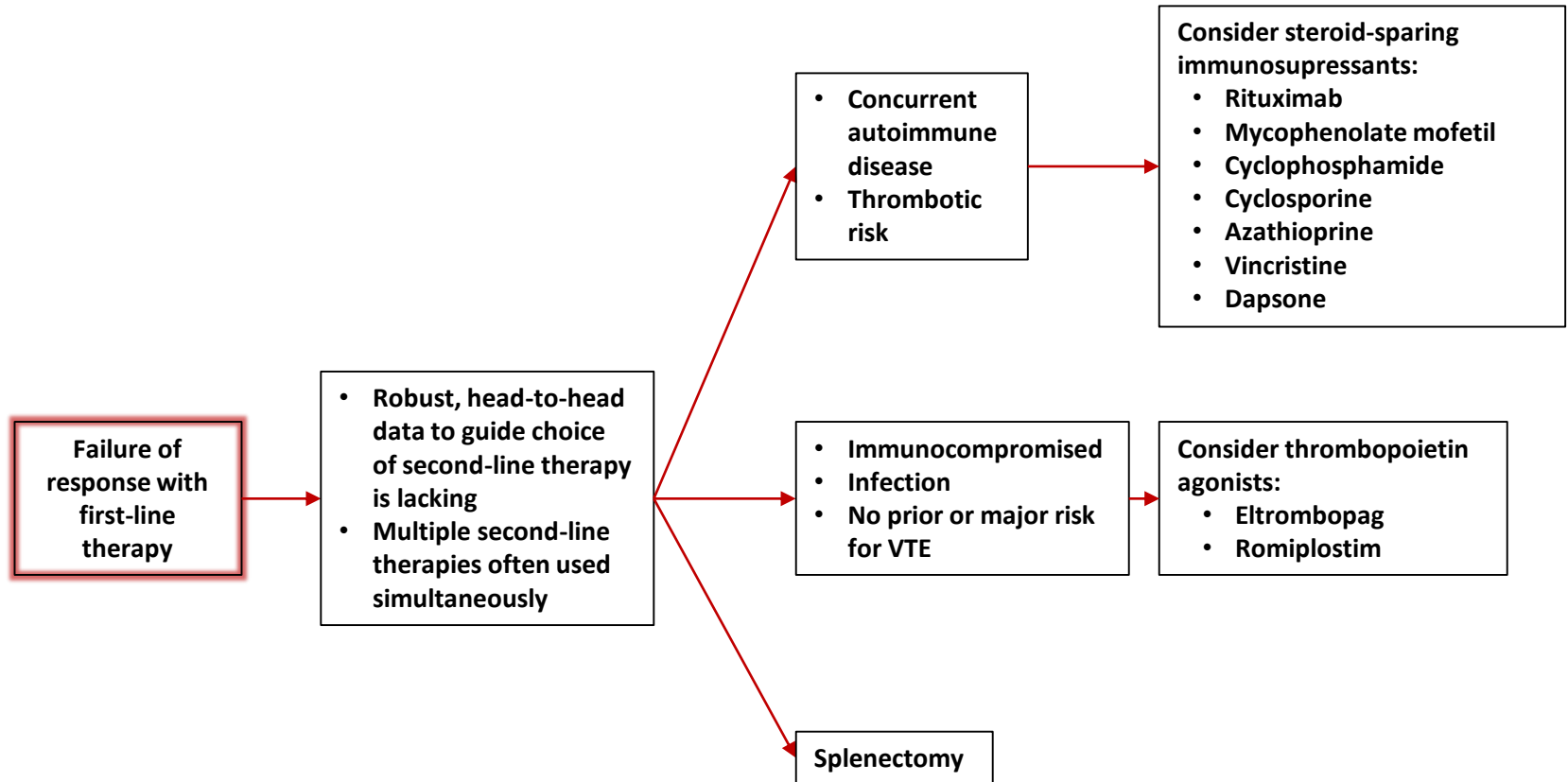
Initial therapy

- General guidelines on who to treat^{1,2}:
 - Platelets $<30 \times 10^9/L$
OR
 - Bleeding signs or symptoms
- Decision to treat must be individualized based on age, co-morbidities, bleeding risk, history of bleeding, activity level, and patient preferences.



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Second-line therapy^{1,2,7}



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Urgent therapies

Urgent therapies

- Check coagulation studies (PT/INR, aPTT, fibrinogen)
- Ensure no other factors exacerbating bleeding risk
- Review medications for causes of DITP, platelet inhibition or increased bleeding
- Ensure adequate control of blood pressure
- Minimize trauma

- Treatment often consists of combinations of first and second-line ITP therapies^{1,2,7}
- Data lacking on optimal management of ITP in emergency situations, with evidence largely limited to case reports

- "Platelet boilermaker"^{3,4}:
 - IVIG 1g/kg continuous infusion
 - 1 unit platelets every 6 h
 - Both run continuously over 24 h

IVIG 1 g/kg

Platelet transfusions

Tranexamic acid 1 gram PO TID

Recombinant factor VIIa

Urgent splenectomy

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First-line therapies: dosing and efficacy^{1,2}

Treatment	Initial response rate	Time to initial response	Peak response time	Duration of response	Toxicity
Corticosteroids <ul style="list-style-type: none"> ▪ Dexamethasone <ul style="list-style-type: none"> • 40 mg PO daily x 4 days, every 2-4 weeks for 1-4 cycles ▪ Prednisone <ul style="list-style-type: none"> • 1 mg/kg/d x 40 days ▪ Methylprednisolone <ul style="list-style-type: none"> • 30mg/kg/d x 7 days 	<p>Up to 90%</p> <p>70-80%</p> <p>Up to 95%</p>	<p>2-14 days</p> <p>4-14 days</p> <p>4-14 days</p>	<p>4-28 days</p> <p>7-28 days</p>	<p>50-80% in remission after 2-5 years follow-up (using 3-6 cycles)</p> <p>13-15% estimated remission at 10 years</p> <p>23% in remission at 39 months</p>	<p>Weight gain, hyperglycemia, edema, hypertension, peptic ulcer disease, cataracts, avascular necrosis, immune suppression, adrenal insufficiency</p>
IVIG <ul style="list-style-type: none"> • 1g/kg/d for 1-2 days 	<p>Up to 80%</p>	<p>1-3 days</p>	<p>2-7 days</p>	<p>Short: platelets return to pre-treatment levels within 2-4 weeks</p>	<p>Flu-like illness, aseptic meningitis, neutropenia, thrombosis, rare anaphylaxis in IgA deficiency</p>
Anti-D immune globulin <ul style="list-style-type: none"> • 50-75 µg/kg 	<p>Up to 80%</p>	<p>1-3 days</p>	<p>2-7 days</p>	<p>Short: platelets return to pre-treatment levels within 2-4 weeks</p>	<p>Hemolytic anemia, DIC, renal failure</p>

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Drug-induced ITP⁸

Commonly-implicated drugs

Class	Drug
Heparins	UFH, LMWH
Platelet inhibitors	Abciximab, tirofiban, eptifibatide
Antibiotics	Linezolid, rifampin, vancomycin, sulfonamides
Anticonvulsants	Phenytoin, carbamazepine, valproate,
H ₂ blockers	Ranitidine, cimetidine
Analgesics	Acetaminophen, NSAIDS
Diuretics	HCTZ, Chlorothiazide

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